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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,312	09/28/2005	Yonggang Du	CN030006	6434

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EXAMINER

AMINZAY, SHAIMA Q

ART UNIT PAPER NUMBER

2618

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/551,312

Applicant(s)

DU ET AL.

Examiner

Shaima Q. Aminzay

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20 (**Du** et al., hereinafter '312) are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, and 13 of US Application 10/557,967 (Zhang et al., hereinafter '967). Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claims 1 and 12, Zhang ('967) discloses a "method for canceling interference signals brought by introducing P2P (Peer to Peer) communication in wireless communication systems, performed by a network system, comprising: (i) receiving a call request from a user equipment in a cell for communicating in UP-BASE STATION-DOWN mode; (ii) judging whether there is an appropriate link timeslot in the several available timeslots for the user equipment to avoid being interfered by P2P signals transmitted by the chosen user equipments allocated in the appropriate timeslot when the user equipment communicates in the appropriate timeslot, according to the relative position of the user equipment and the chosen user equipments in P2P communication in the cell; and (iii) approving the call request from the user equipment and allocating the appropriate timeslot to the user equipment if the appropriate timeslot is available", and "network system for canceling interference signals brought by introducing P2P communication in wireless communication systems, comprising: a receiving means, for receiving call request from a user equipment in a cell for communicating with the other user equipment in P2P communication mode; a judging means, for judging whether there are at least two appropriate timeslots in the several available timeslots for the user equipment and the other user equipment in P2P communication in the appropriate timeslots to avoid producing interference of P2P signals to said user equipments allocated with radio resources in the appropriate timeslots, according to the relative position of the

user equipment and the other user equipment and chosen user equipments allocated with radio resources in the cell; an approving means, for approving the call request from the user equipment when there are appropriate timeslots and allocating the appropriate timeslots to the user equipment and the other user equipment" (page 7 left-column, page 8, left-column, and right columns, claims 1, and 13).

The cited reference has more limitations, thereby encompassing the present application's limitations.

Furthermore, omission of an element and its function in combination is obvious expedient if remaining elements perform same functions as before in re KARLSON (CCPA) 136 USPQ 184 (1963).

For these reasons, independent claims 1, and 12 are rejected. Claims 2-11, and 13-20 are dependent of claims 1, and 12 are rejected on the ground of nonstatutory obviousness-type double patenting under the same reasons set forth in claims 1, and 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wellig (Wellig et al., U.S. Patent No. 6,580,704).

Regarding claim 1, Wellig discloses a method performed by a wireless communication system for managing peer-to-peer (P2P) communications (see for example, *Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, Mobile-to-Mobile (peer-to-peer) communication control (management) in a wireless communication system*), the method comprising the steps of: (a) receiving a request from a mobile terminal for initiating a call to another mobile terminal (see for example, *Figures 1-4, column 4, lines 65-67, column 5, lines 1-25, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57, receives a request to initiate a call to other Mobile*); (b) determining whether P2P

communication can be established between the two mobile terminals (see for example, *Figures 1-4, column 4, lines 65-67, column 5, lines 1-25, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57, decides on making connections between the two Mobile*); (c) determining an operating mode of the two mobile terminals for P2P communication (see for example, *column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66*); and (d) if the P2P communication can be established and if both mobile terminals are in a default mode for P2P communication (see for example, *column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57*), establishing P2P communication between the two mobile terminals (see for example, *column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57*).

Regarding claim 12, Wellig discloses a wireless communication system capable of managing peer-to-peer (P2P) communications (see for example, *Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, Mobile-to-Mobile (peer-to-peer) communication control (management) in a wireless communication system*), comprising: means for receiving a request from a mobile terminal for initiating a call to another mobile

terminal; means for determining whether P2P communication can be established between the two mobile terminals (*see for example, Figures 1-4, column 4, lines 65-67, column 5, lines 1-25, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57, receives a request to initiate a call to other Mobile*); means for determining an operating mode of the two mobile terminals for P2P communication (*see for example, Figures 1-4, column 4, lines 65-67, column 5, lines 1-25, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57, decides on making connections between the two Mobile*); and means for establishing P2P communication between the two mobile terminals (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66*), the establishing means establishing the P2P communication if the P2P communication can be established and if both mobile terminals are in a default mode for P2P communication (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57*).

Regarding claims 2 and 13, Wellig teaches all the limitations of claims 1, and 12, and further, Wellig teaches (i) determining whether both mobile terminals have subscribed P2P communication services (*see for example, Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines*

1-10); and (ii) if both mobile terminals have subscribed the P2P communication services (*see for example, Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10*), determining whether both mobile terminals are suitable for using the P2P communication services (*see for example, Figures 1-4, column 4, lines 65-67, column 5, lines 1-25, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57*).

Regarding claims 3 and 14, Wellig teaches all the limitations of claims 1, and 12, and further, Wellig teaches if one of the mobile terminals is in a prompt mode, sending a prompt to the mobile terminal in the prompt mode (*see for example, Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66*), along with information about incentives for using P2P communication services (*see for example, Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66*).

Regarding claims 4 and 15, Wellig teaches all the limitations of claims 3, and 14, and further, Wellig teaches if the mobile terminal in the prompt mode selects the P2P communication services, allocating resources for setting up a P2P link between the two mobile terminals (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10,*

lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57).

Regarding claim 5, Wellig teaches all the limitations of claim 1, and further, Wellig teaches if both mobile terminals are in the prompt mode, sending a prompt to the mobile terminals, along with information about incentives for using P2P communication services (*see for example, Figures 1-4, column 1, lines 9-14, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66*).

Regarding claim 6, Wellig teaches all the limitations of claim 5, and further, Wellig teaches if both of the mobile terminals in the prompt mode select the P2P communication services, allocating resources for setting up a P2P link between the two mobile terminals (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57*).

Regarding claim 7, and 16, Wellig teaches all the limitations of claims 1, 12, and further, Wellig teaches recording information relating to P2P communication services in at least one of a home location register and a visitor location register(*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12,*

column 12, lines 3-17, column 13, lines 13-57), the recording means recording the information after the P2P communication between the two mobile terminals is completed (see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57).

Regarding claim 8, and 17, Wellig teaches all the limitations of claims 7, 16, and further, Wellig teaches sending discounted billing information to the mobile terminals, the sending means sending the discounted billing information after the P2P communication between the two mobile terminals is completed (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, lines 54-67, column 12, lines 1-17, column 13, lines 13-57).*

Regarding claims 9 and 18, Wellig teaches all the limitations of claims 4, and 15, and further, Wellig teaches taking back resources allocated to the P2P link (*see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57); and means for providing conventional communication services to the mobile terminals (see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column*

10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57); wherein the taking back means takes back the resources if the P2P link is not available between the two mobile terminals (see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57); wherein the providing means provides the conventional communication services if the P2P link is not available between the two mobile terminals (see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57).

Regarding claims 10 and 19 Wellig teaches all the limitations of claims 3, and 14, and further, Wellig teaches calculating the incentives based on statistical benefits resulting from at least one of an increase in system capacity and an decrease in overall interference in one cell (see for example, column 4, lines 65-67, column 5, lines 26-51, column 6, lines 1-10, column 8, lines 32-66, column 9, lines 11-19, column 10, lines 66-67, column 11, lines 1-12, column 12, lines 3-17, column 13, lines 13-57).

Regarding claims 11 and 20 Wellig teaches all the limitations of claims 3, and 14, and further, Wellig teaches calculating the incentives in accordance with actual traffic load conditions and interference for a predetermined time duration

(see for example, column 4, lines 65-67, column 5, lines 1-67, column 6, lines 1-10, column 8, lines 32-66, column 10, lines 66-67, column 11, lines 1-12, lines 54-67, column 12, lines 1-17).

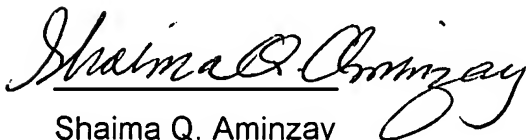
Conclusion

The prior art made of record considered pertinent to applicant's disclosure, see PTO-892 form.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew D. Anderson can be reached on 571-272-4177. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shaima Q. Aminzay
(Examiner)


MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER

December 9, 2006